

# **LWG vs EPA Alternatives RALs**

Alternatives		PCBs (ug/kg)		BaP EQ (mg/kg)		Sum DDE/DDx (ug/kg)		2,3,4,7,8-PeCDF (pg/g)		Benthic Risk	
LWG	EPA	LWG	EPA	LWG	EPA	LWG-DDE	EPA-DDx*	LWG	EPA**	LWG	EPA
B	B	1000	1000	20	20	1000	develop	--	?	MQ<0.7 @ t=10	Plus L2 & L3
C	C	750	750	15	15	1000	develop	--	?	MQ<0.7 @ t=0	Plus L2 & L3
D	D	500	500	8	8	200	develop	--	?	MQ<0.7 @ t=0	Plus L2 & L3
E	E	200	200	8	8	200	develop	--	?	MQ<0.7 @ t=0	Plus L2 & L3
F	F	PRG HT	100	PRG HT	4	PRG HT	develop	PRG HT	20***	MQ<0.7 @ t=0	Plus L2 & L3
--	G	--	50	--	0.4	--	develop	--	1.5	--	Plus L2 & L3

\*EPA's comments asks for DDx RALs consistent with Arkema's Early Action. However, it is not clear how the effectiveness could be evaluated because there are no PRGs for DDx.

\*\*EPA's comment states ug/kg, but they probably meant pg/g.

\*\*\* Based on an initial analysis by GSI, this value would be more consistent with an Alternative B or C. Need clarification from EPA.

EPA's comment states that RALs must be developed for all risk drivers (cancer risk>10<sup>-4</sup> or HQ>1)

## **GSI's Analysis of PeCDF congener and total dioxin/furan TEQ**

2,3,4,7,8-PeCDF	Total d/f TEQ	Total d/f TEQ	Lower Duwamish Revised FS
50	150		
20	60	50	Max incremental SWAC reduction
10	30	35	Incremental SWAC reduction
5	20	20	Incremental SWAC reduction
3	15	15	Point of minimal Change in SWAC (~ bkgd).
1.5	5		